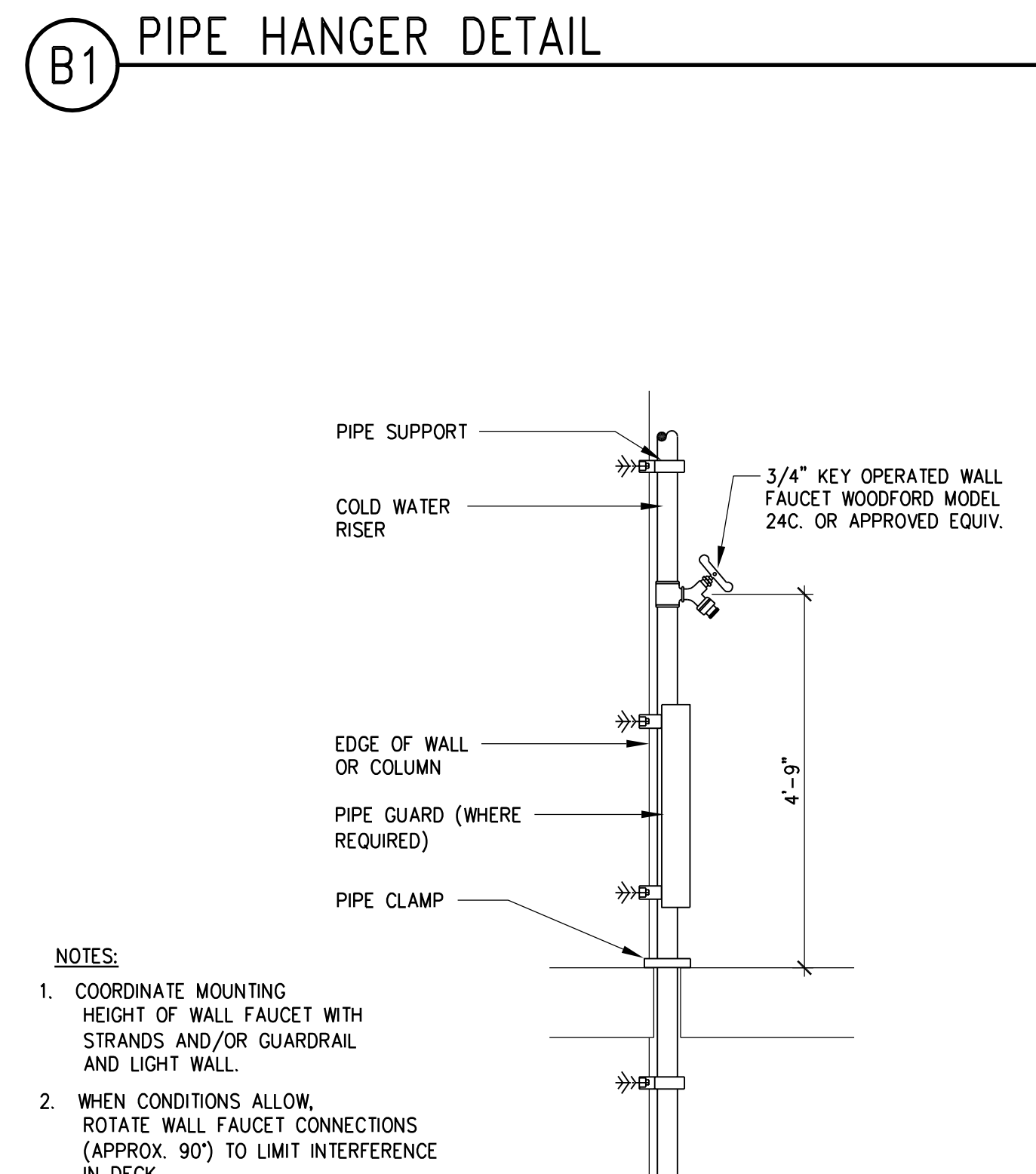
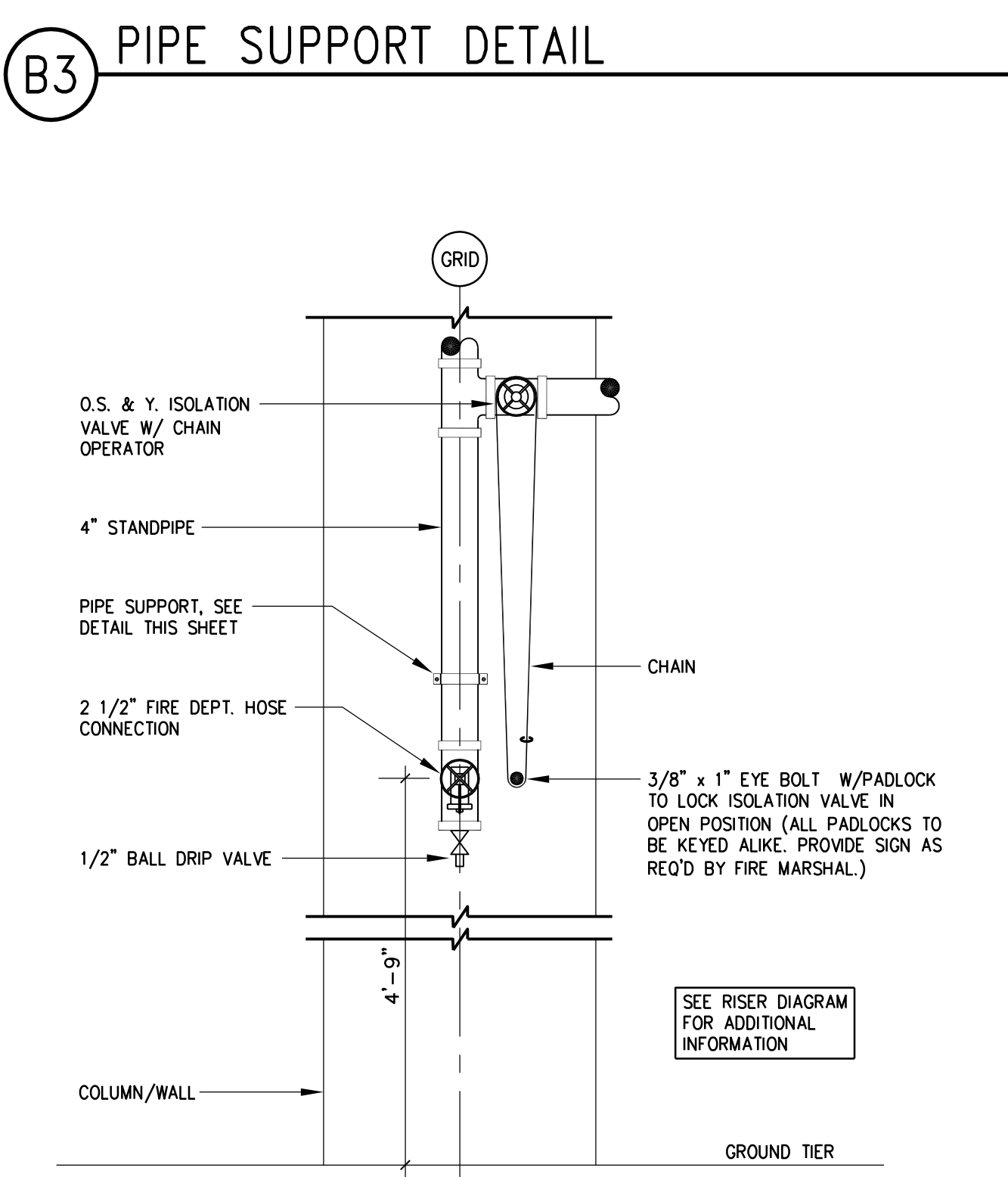


three inches = one foot
one and one-half inch = one foot
one inch = one foot
three-quarters inch = one foot
one-half inch = one foot
one-quarter inch = one foot
three-eighths inch = one foot
one-eighth inch = one foot

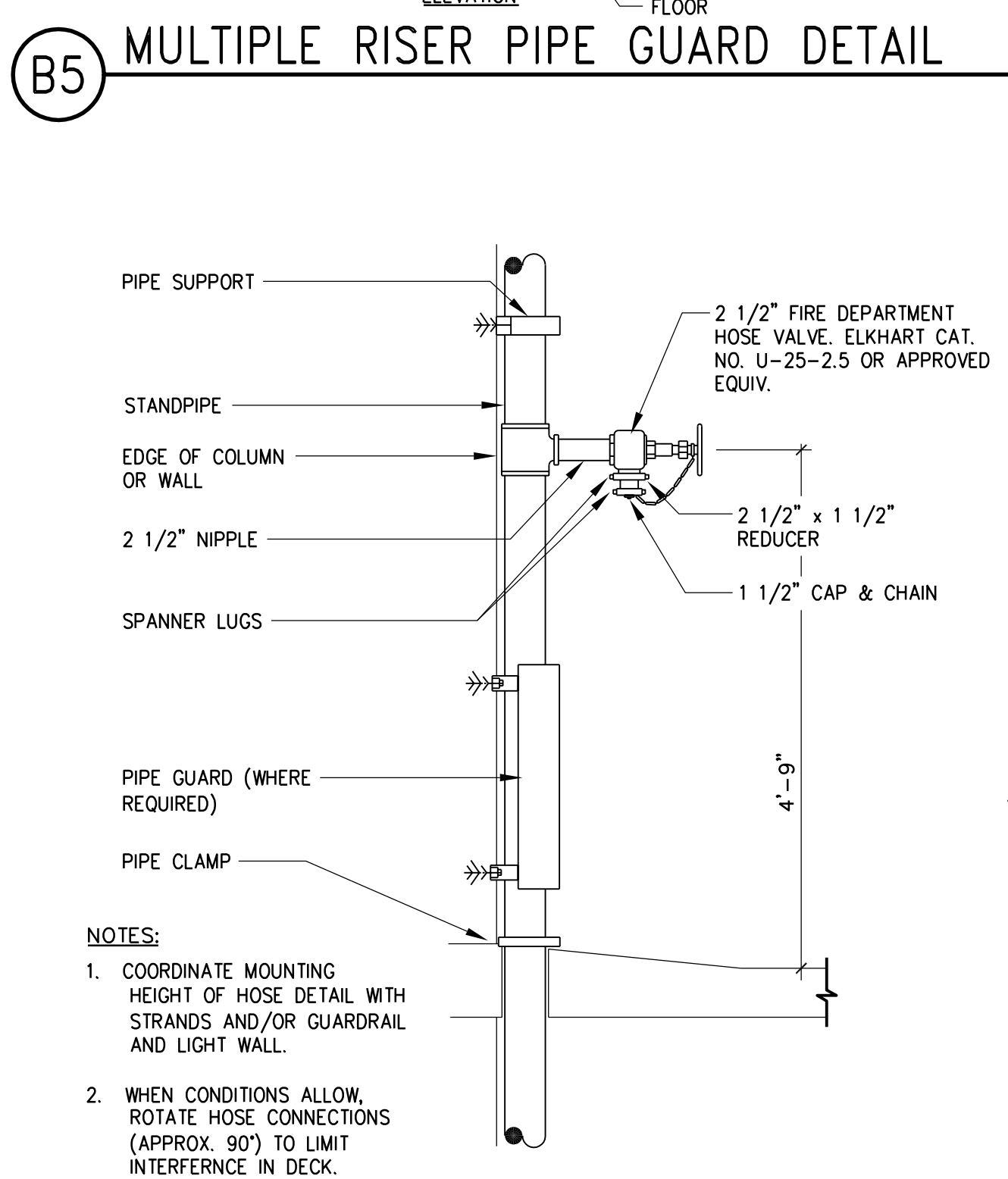
B1 PIPE HANGER DETAIL



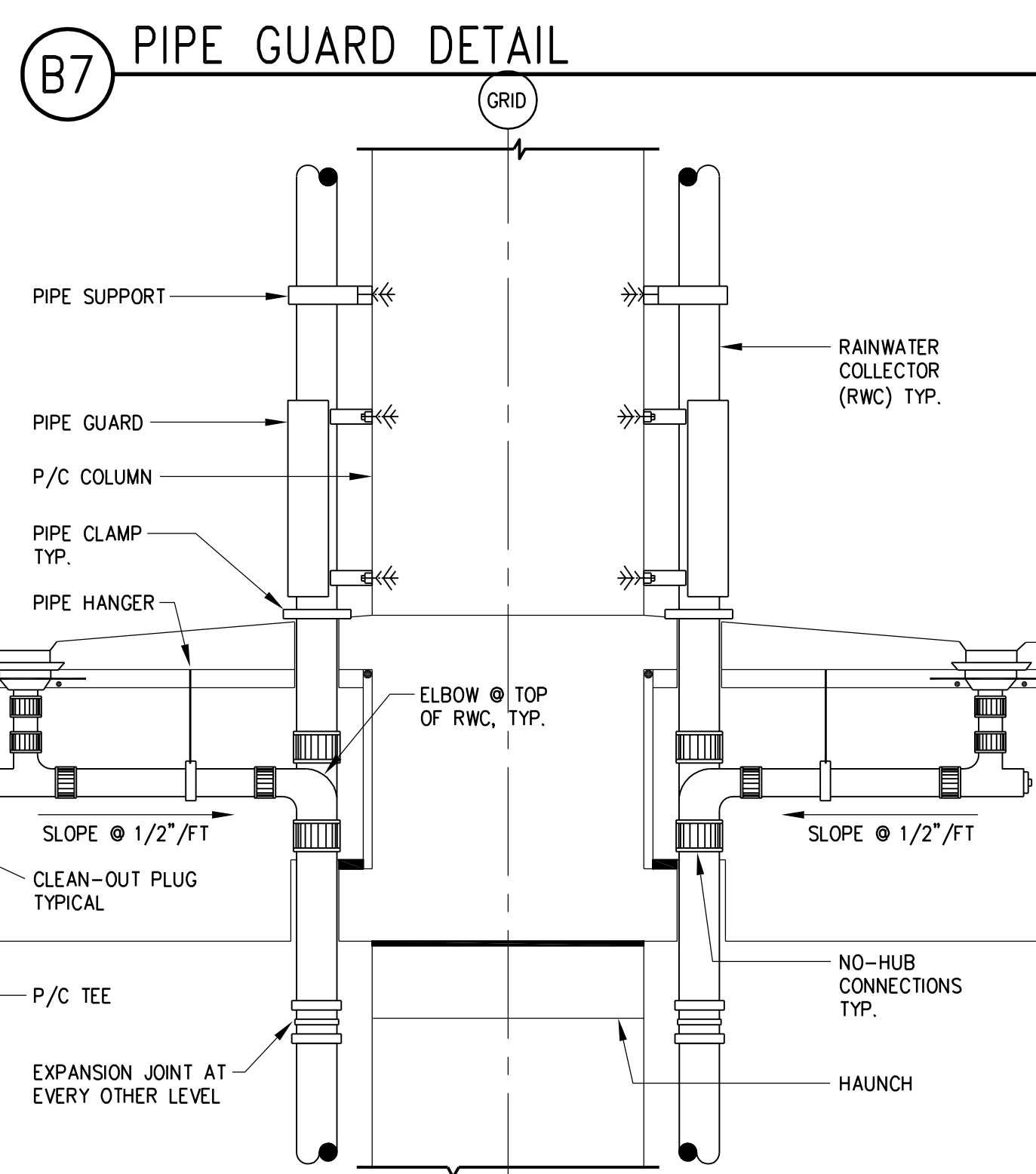
B3 PIPE SUPPORT DETAIL



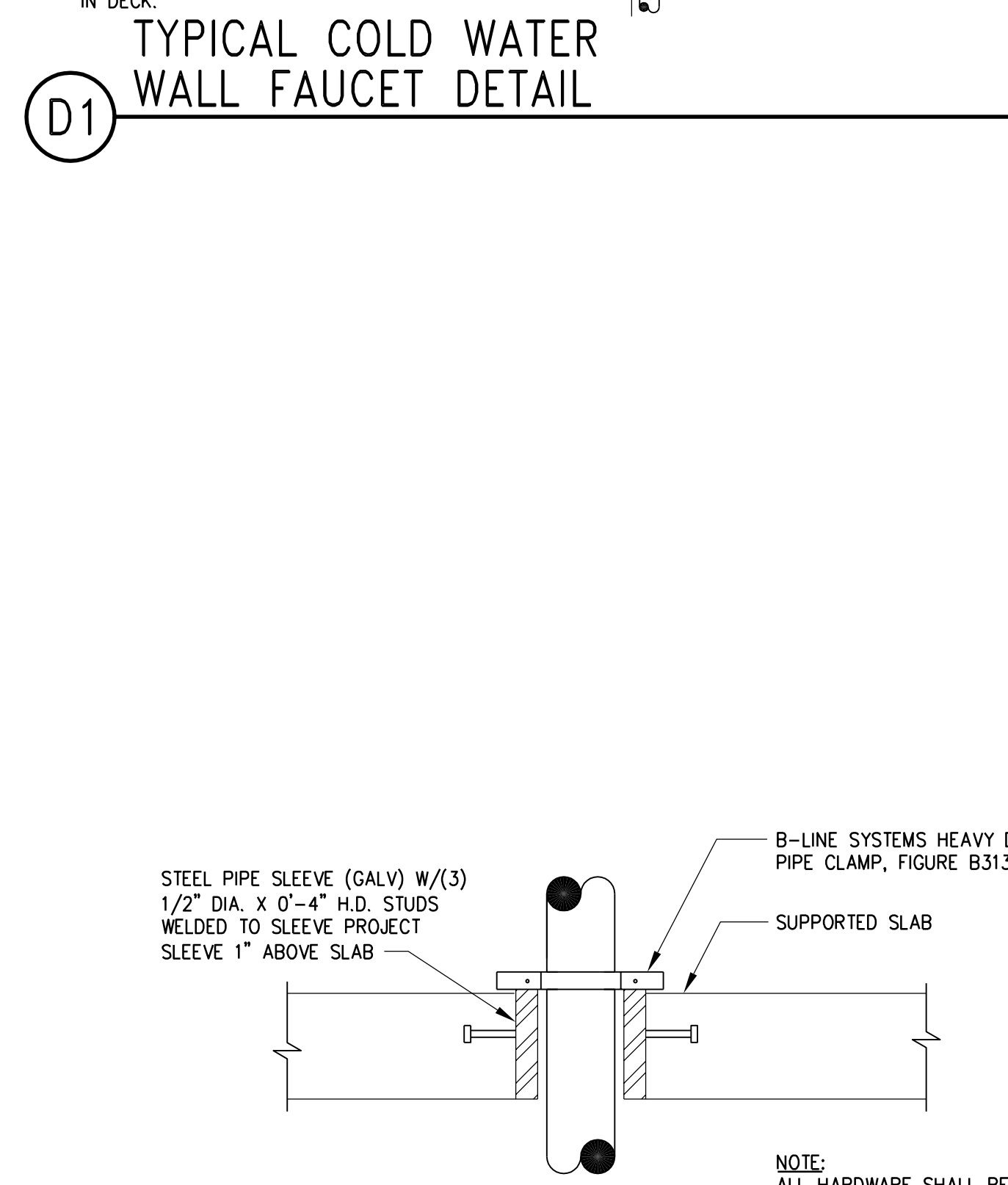
B5 MULTIPLE RISER PIPE GUARD DETAIL



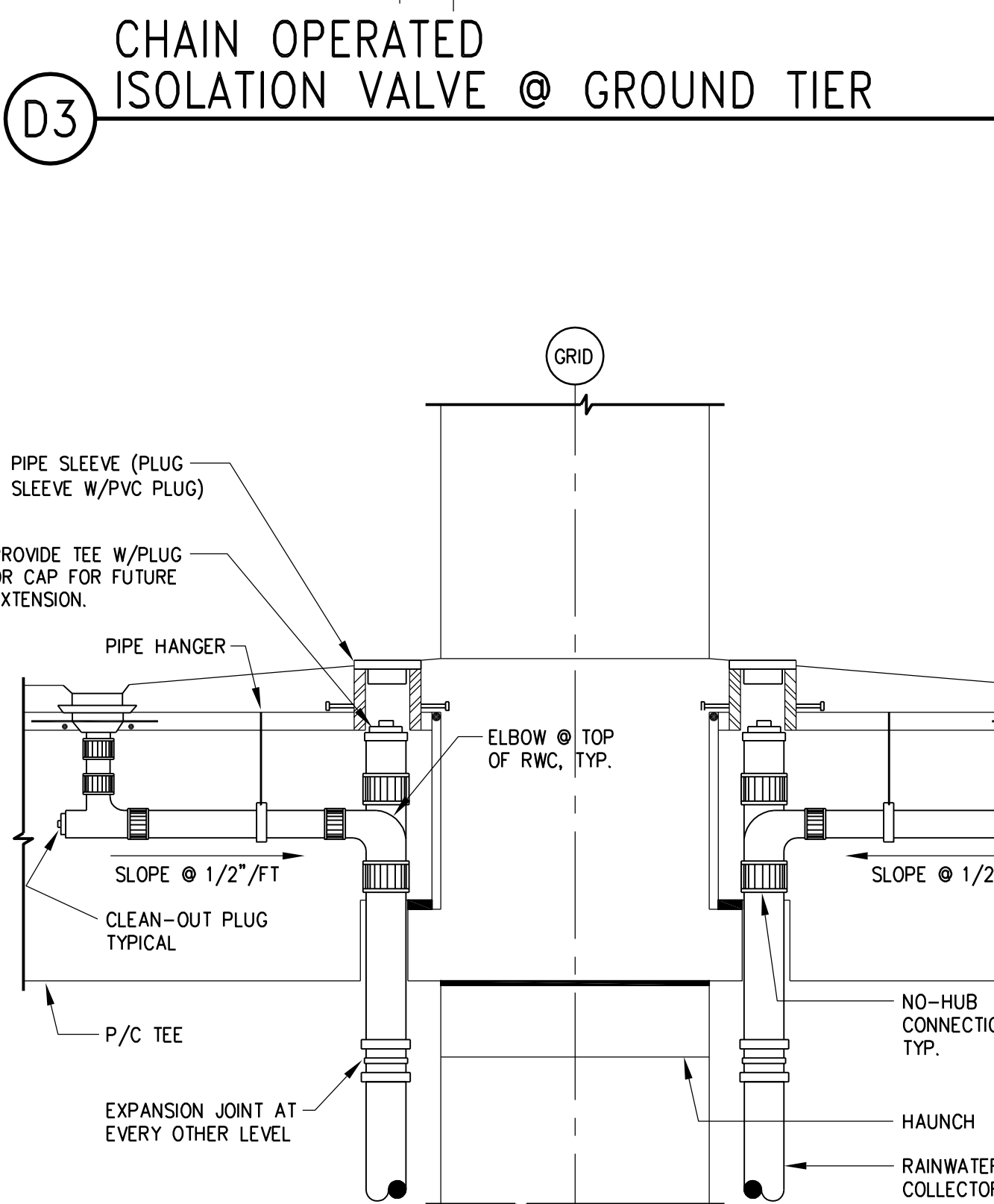
B7 PIPE GUARD DETAIL



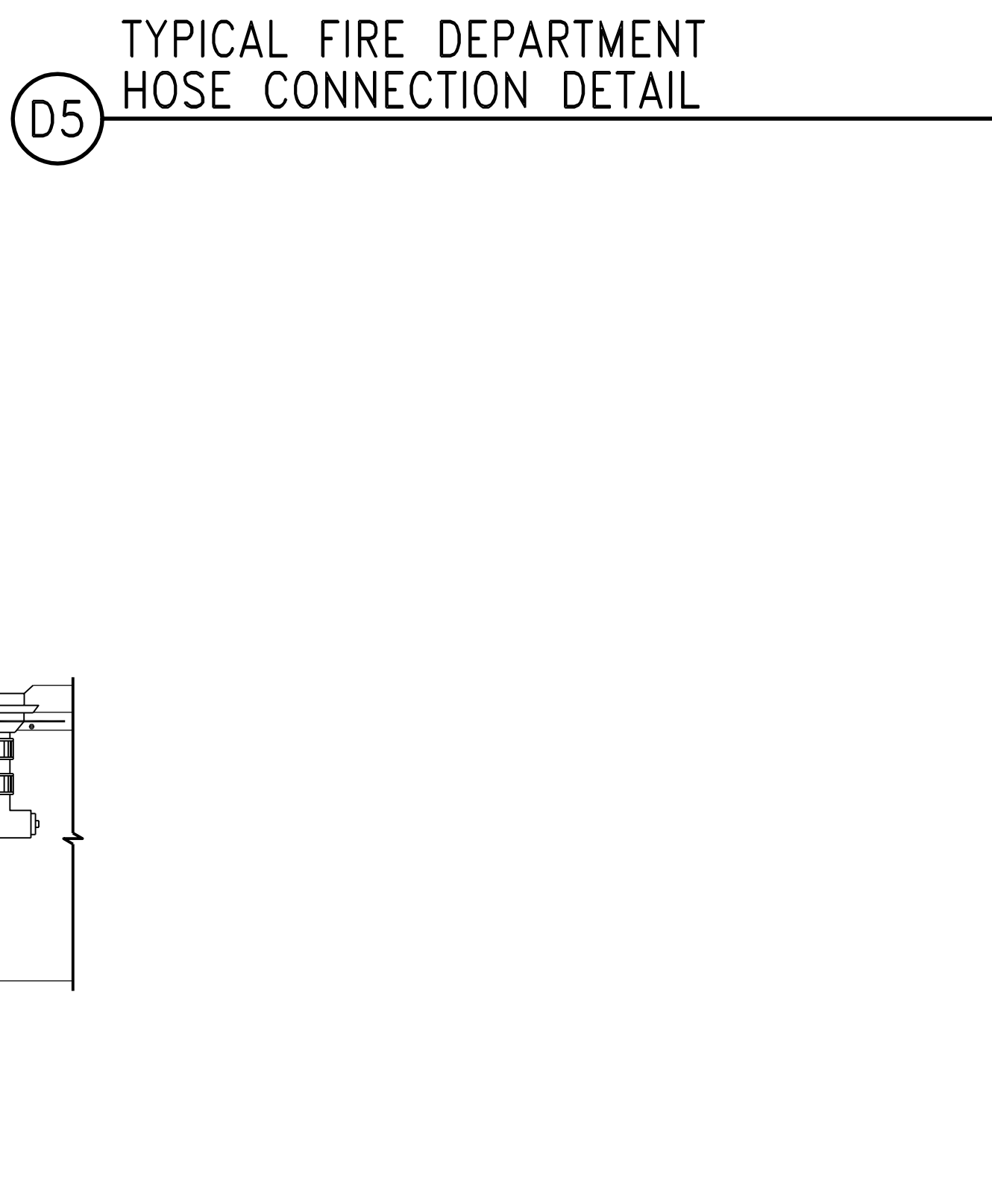
D1 TYPICAL COLD WATER WALL FAUCET DETAIL



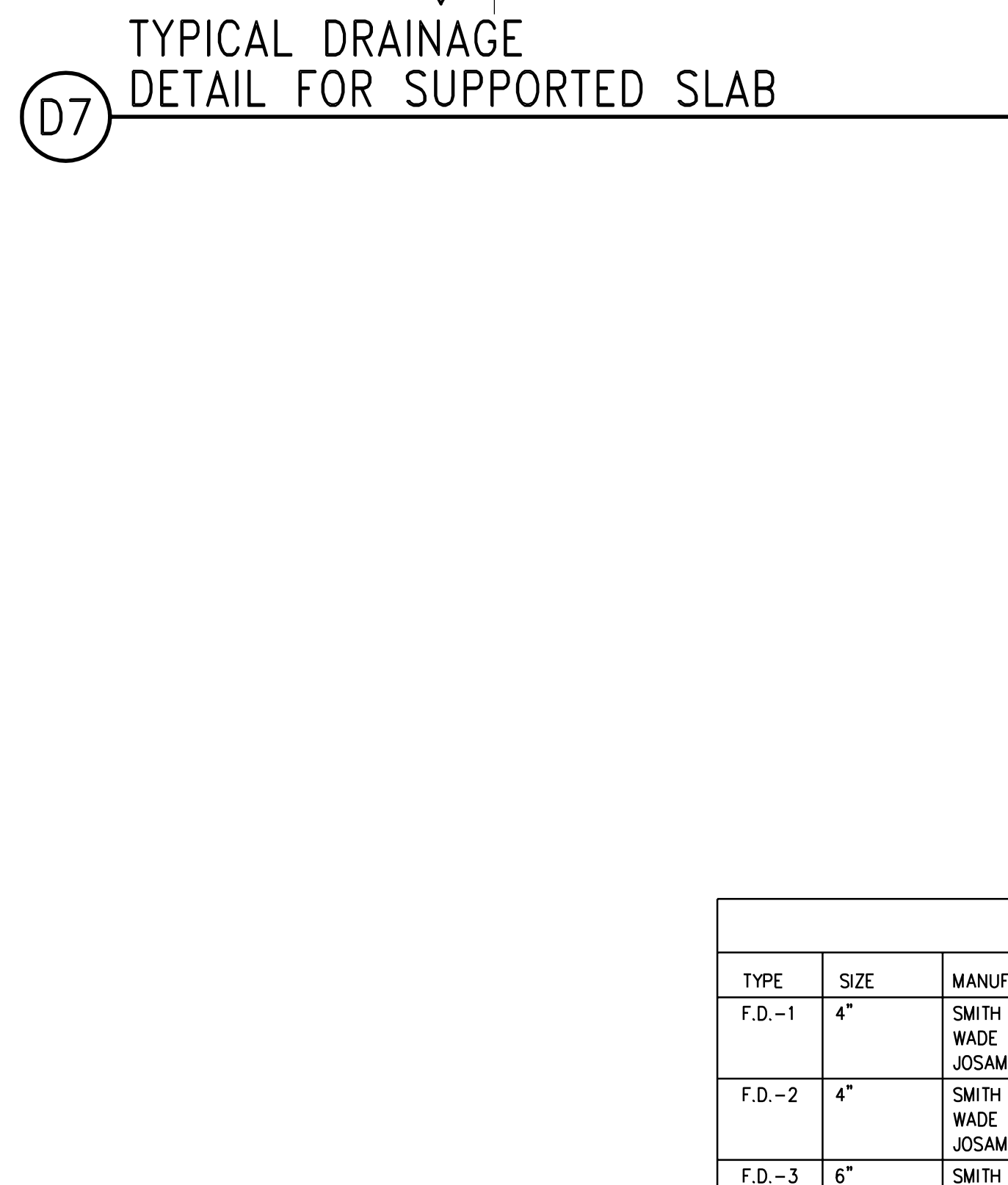
D3 CHAIN OPERATED ISOLATION VALVE @ GROUND TIER



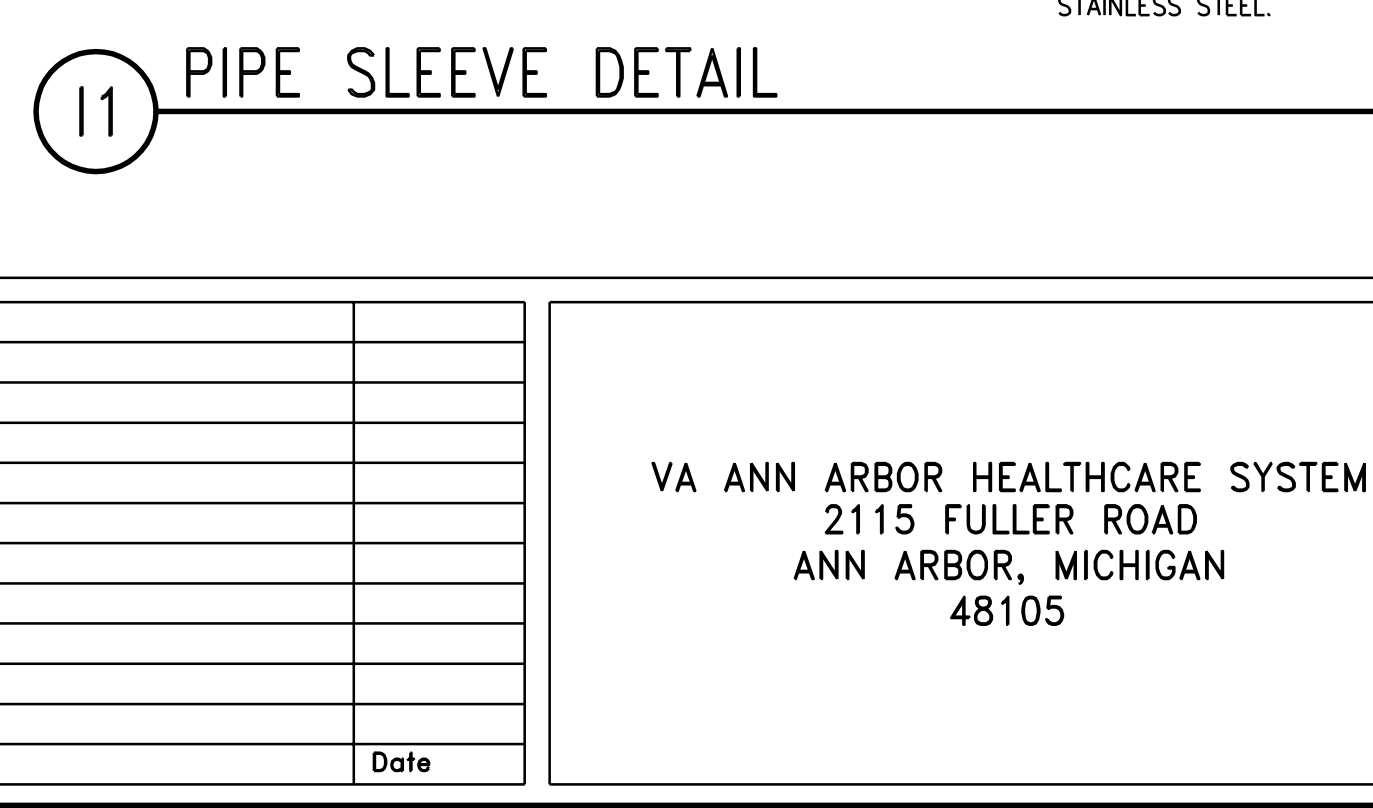
D5 TYPICAL FIRE DEPARTMENT HOSE CONNECTION DETAIL



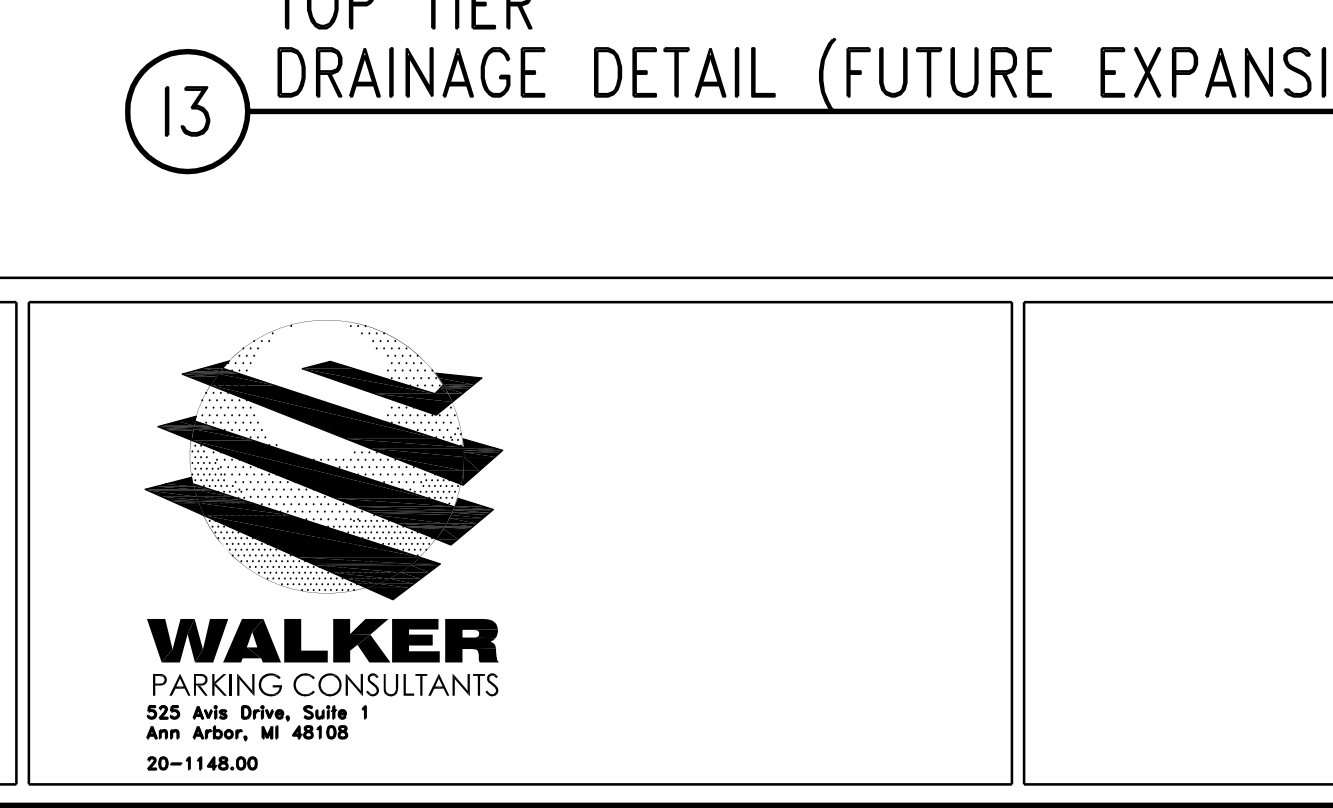
D7 TYPICAL DRAINAGE DETAIL FOR SUPPORTED SLAB



I1 PIPE SLEEVE DETAIL

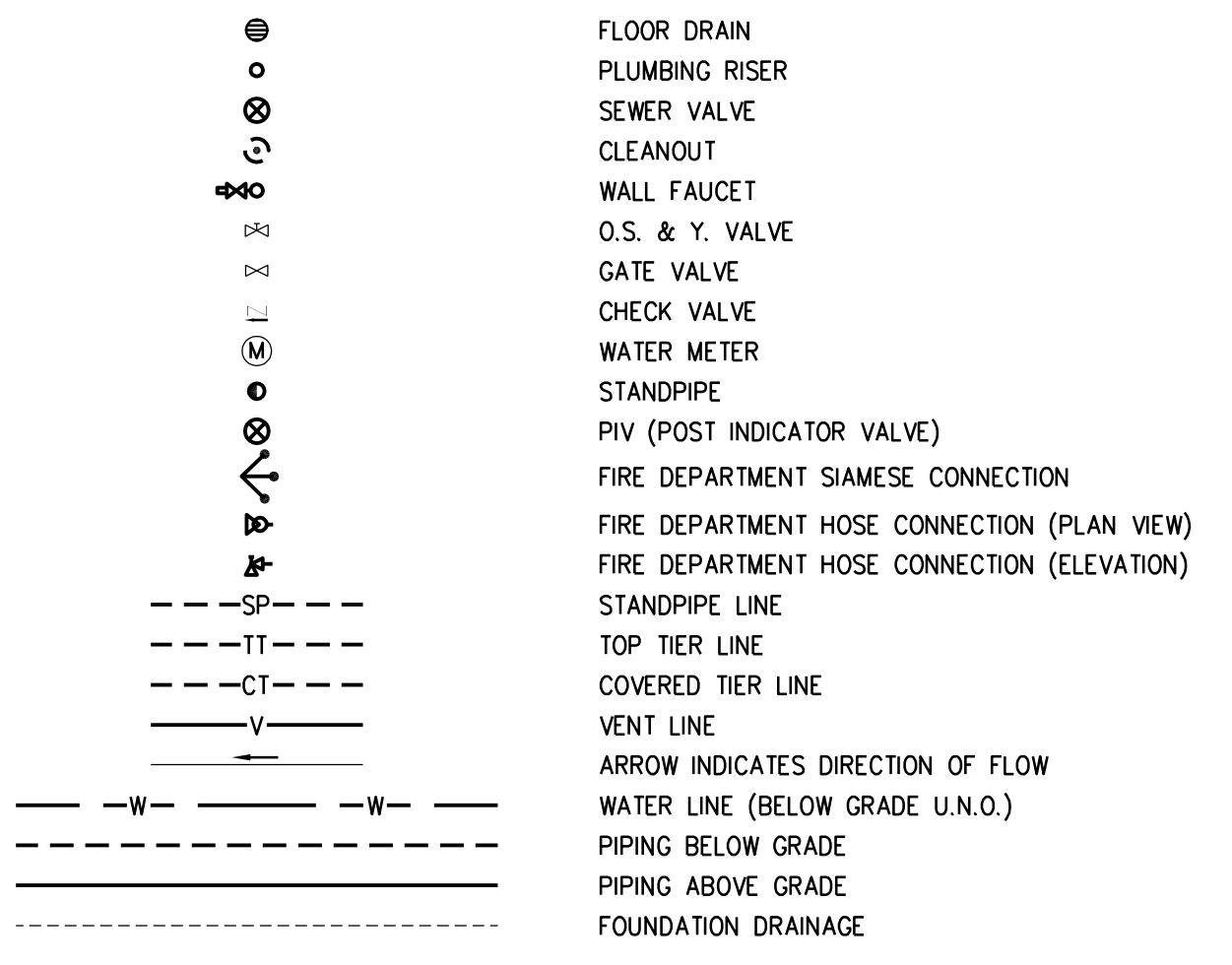


I3 TOP TIER DRAINAGE DETAIL (FUTURE EXPANSION)



- GENERAL NOTES:**
(APPLY TO ALL SHEETS)
- ALL DRAINAGE PIPING ABOVE GRADE SHALL BE CAST IRON W/ NO-HUB CONNECTIONS. ALL DRAINAGE PIPING BELOW GRADE SHALL BE CAST IRON W/ HUB AND SPIGOT CONNECTIONS. SLOPE ALL DRAINAGE PIPING AT 1/8" PER FOOT MINIMUM UNLESS NOTED OTHERWISE. ALL R.W.C.'S SHALL HAVE EXPANSION JOINTS LOCATED AT EVERY OTHER LEVEL. ALL PUMP DISCHARGE LINES SHALL BE TYPE "L" COPPER PIPE U.N.O. .
 - PIPING FOR COLD WATER RISER SHALL BE 1" TYPE "L" COPPER PIPE ABOVE. SLOPE AT 1/4" PER 10'-0" MINIMUM TO DRAIN POINTS UNO.
 - TOP OF DRAIN GRATE SHALL BE 1/2" BELOW FINISHED FLOOR AT SUPPORTED TIERS AND 1" AT GROUND TIER. TYPICAL FOR ALL DRAINS. SEE STRUCTURAL DRAWINGS FOR FLOOR ELEVATIONS.
 - ALL PIPING AND RISERS EXPOSED TO POSSIBLE BUMPER DAMAGE SHALL BE PROTECTED W/ PIPE GUARDS. SEE DETAILS B7 & D1/MO-001.
 - PROVIDE CAST IRON PIPE SLEEVES 2" LARGER THAN PIPE OUTSIDE DIA. AT GRADE SLAB PENETRATIONS. WRAP PIPES W/ 1/2" FIBERGLASS AND SEAL OPENING W/ APPROVED SEALANT. TYPICAL AT GRADE SLAB.
 - PROVIDE 1/3 CU. YD. CONCRETE THRUST BLOCK AT BASE OF ALL RAIN WATER COLLECTORS AND AT ALL BENDS BELOW GRADE, FOR SUPPORT.
 - PIPE HANGERS AND SUPPORTS SHALL BE ARRANGED SO THAT THEY WILL SUSTAIN THE LOADS AND RETAIN THE PIPING SECURELY IN POSITION UNDER FULLY LOADED CONDITIONS. SEE DETAILS B3 & B1/M-001.
 - COORDINATE ALL BLOCK-OUTS REQUIRED W/ GENERAL CONTRACTOR.
 - CLEANOUTS SHALL BE LOCATED AT THE BASE OF ALL DRAINAGE RISERS AND AT OTHER LOCATIONS SHOWN ON THE DRAWINGS.
 - THE USE OF POWDER, GAS OR OTHER TYPE OF POWER PROPELLED FASTENERS IS PROHIBITED. MOUNTING HOLES FOR ALL FASTENERS CAST IN PLACE ADDITIONAL MOUNTING HOLES MAYBE DRILLED W/ APPROVAL OF STRUCTURAL ENGINEER.
 - PIPING FOR STANDPIPE SYSTEM SHALL BE SCHEDULE 40 GALVANIZED STEEL. ABOVE GRADE. STANDPIPE RISERS ARE TO BE 4". ALL NEW INTERCONNECTING PIPING IS TO BE 6". CONNECT TO AND MODIFY THE INTERCONNECTING STANDPIPE SYSTEM AS INDICATED ON THE DRAWINGS. ALL INTERCONNECTING STANDPIPE PIPING IS TO BE HUNG UNDER LEVEL B/A FLOOR AND ROUTED AS CLOSE AS POSSIBLE TO COLUMNS AND WALLS. ROUTE UP BETWEEN THE TEE STEMS WHERE INDICATED. ROUTE PIPING AS HIGH AS POSSIBLE WHILE MAINTAINING 1/4" SLOPE PER 10'-0" MINIMUM TO DRAIN POINTS (STANDPIPE AND SAMESE CONNECTIONS). DO NOT INSTALL ADDITIONAL AUXILIARY DRAIN VALVES WITHOUT WRITTEN APPROVAL OF ENGINEER. MAINTAIN A MINIMUM HEADROOM CLEARANCE OF 8'-3". COORDINATE ANY REQUIRED BLOCKOUTS/SLEEVES/DAPS IN TEE STEMS AND BEAMS WITH GENERAL AND PRECAST CONTRACTORS. SEE RISER DIAGRAM ON SHEET M-601 FOR ISOLATION VALVE AND OTHER REQUIREMENTS. PROVIDE EARTHQUAKE BRACING AND SUPPORTS AS REQUIRED BY N.E.P.A. DO NOT INSTALL PIPING CLOSER THAN 3'-0" HORIZONTALLY TO LIGHT FIXTURES.
 - FIRE PROTECTION SYSTEM, PIPING, VALVES AND ACCESSORIES INDICATED ON THE DRAWINGS ARE DIAGRAMMATIC ONLY. IT IS THE RESPONSIBILITY OF THE DESIGNING CONTRACTOR TO VERIFY EQUIPMENT SELECTIONS, PIPE ROUTING, PIPE SIZING, DRAIN POINTS, TEST CONNECTIONS, ETC., FOR STATE BUILDING CODE COMPLIANCE, INSURER COMPLIANCE, ARCHITECTURAL AND CONFORMITY. THE CONTRACTOR SHALL PROVIDE ALL DRAWINGS AND CALCS REQUIRED BY THE FIRE MARSHAL AND ENGINEER.
 - ALL FIRE PROTECTION VALVES REQUIRED TO BE LOCKED OR MONITORED BY THE N.F.P.A. SHALL BE LOCKED.
 - FIRE PROTECTION CONTRACTOR SHALL PROVIDE ALL TESTS AND INSPECTIONS PER N.F.P.A. 14. ALL REQUIRED PERMITS, APPROVALS AND INSPECTION CERTIFICATES SHALL BE OBTAINED AND PAID FOR BY THIS CONTRACTOR.
 - PROVIDE EXPANSION LOOPS AT ALL LOCATIONS PIPING CROSSES EXPANSION JOINTS.
 - ALL PIPING AND MECHANICAL EQUIPMENT SHALL BE INSTALLED TO MAINTAIN A MIN. HEADROOM CLEARANCE OF 8'-3".

MECHANICAL SYMBOLS



MECHANICAL ABBREVIATIONS

A.F.F.	ABOVE FINISHED FLOOR	MT	MOUNT
ARCH.	ARCHITECT (ARCHITECTURAL)	O.S. & Y.	OUTSIDE SCREW & YOKE
BLK	BLOCK	P/C	PRECAST
C.I.P.	CAST IN PLACE	P.S.I.	POUNDS PER SQUARE INCH
C.O.	CLEANOUT	R.W.C.	RAIN WATER COLLECTOR
CONC.	CONCRETE	SHT.	SHEET
CONN.	CONNECTION	SIM.	SIMILAR
C.W.R.	COLD WATER RISER	S.O.G.	SLAB ON GRADE
D.I.	DUCTILE IRON	SP	STANDPIPE
DET.	DETAIL	SQ. FT.	SQUARE FEET
DIA.	DIAMETER	STRUCT.	STRUCTURAL
F.D.	FLOOR DRAIN	T.D.	TRENCH DRAIN
GALV.	GALVANIZED	T.F.A.	TO FLOOR ABOVE
GEN'L	GENERAL	T.F.B.	TO FLOOR BELOW
G.P.M.	GALLONS PER MINUTE	TYP.	TYPICAL
INV.	INVERT	U.N.O.	UNLESS NOTED OTHERWISE
M.C.	MECHANICAL CONTRACTOR	W/	WITH
MH	MANHOLE		

DRAINAGE SCHEDULE

TYPE	SIZE	MANUFACTURER & CAT. NO.	REMARKS
F.D.-1	4"	SMITH 2140C-U-M-B (+7080) WADE 1200-5-27-31 JOSAM 32200-7-17-60	HEAVY DUTY CAST IRON DECK DRAIN W/ VANDALPROOF DUCTILE IRON GRATE, SEDIMENT BUCKET & BACKWATER VALVE. W/ A.R. COATING.
F.D.-2	4"	SMITH 2140C-U-M-B (+2646Y) WADE 1200-5-27-31 JOSAM 32200-7-17-2	HEAVY DUTY CAST IRON DECK DRAIN W/ VANDALPROOF DUCTILE IRON GRATE, SEDIMENT BUCKET & NO-HUB ADAPTOR. (MIN. GRATE FREE AREA OF 26 SQ. IN.) W/ A.R. COATING.
F.D.-3	6"	SMITH 2295-Y-U-FBS (+2646Y) WADE 2360-5 JOSAM 35460-11-17-2	HEAVY DUTY CAST IRON DECK DRAIN W/ VANDALPROOF DUCTILE IRON GRATE, FLASHING COLLAR & SEDIMENT BUCKET. NO HUB OUTLET (MIN. GRATE FREE AREA OF 57 SQ. IN.) W/ A.R. COATING.
F.D.-4	3"	SMITH 2010-C-B-P050 (+7080) WADE 1103SD8-27-31 JOSAM 30000-A-J	8" DIA. ADJUSTABLE HEAD FLOOR DRAIN W/ SEDIMENT BUCKET, BACKWATER VALVE.

Revisions

Date

VA ANN ARBOR HEALTHCARE SYSTEM
2115 FULLER ROAD
ANN ARBOR, MICHIGAN
48105

WALKER
PARKING CONSULTANTS
525 Aile Drive, Suite 1
Ann Arbor, MI 48106
20-1148-00

CARDIOLOGY MANAGER	DATE	ENGINEERING MANAGER	DATE
INFECTION CONTROL	DATE	CARELINE MANAGER	DATE
SAFETY OFFICER	DATE	CHIEF OF STAFF	DATE

Drawing Title
General Notes & Details

Project Title
Expand East Parking Structure

Building Number
506

Checked

Drawn

Location
VAMC ANN ARBOR, MICHIGAN

Date:
11-09-11

Project No.
506-310

M-001

Office of Facilities

Department of Veterans Affairs